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ABSTRACT

The present invention provides methods of gene therapy to prevent or treat exposure to organophosphate (OP) toxins, such as that observed in Gulf War Syndrome patients. In particular, vectors comprising the PON1 gene, which express the enzyme paraoxonase, can be used to prevent damage from OP toxins when given prior to exposure, or to reduce the toxic effects after exposure. Depending on the PON1 isotype (R or Q), protection against particular toxins may be achieved.

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